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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 964,144	09 25 2001	R. Matthew Mosley	861452.0001	1699

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CUMMINGS AND LOCKWOOD  
GRANITE SQUARE  
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EXAMINER

MERLINO, AMANDA H

ART UNIT PAPER NUMBER

2877

DATE MAILED: 03/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/964,144

Applicant(s)

MOSLEY ET AL.

Examiner

Amanda H Merlino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 25 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 10, 28, 31-53, and 61-62 rejected under 35 U.S.C. 102(b) as being clearly by Cooper et al (5,506,679).

Cooper et al teach of a device for measuring qualities of a substance comprising a sample cell for receiving the substance, a housing defining a recess for receiving a sample cell, at least one light source, at least one first detector spaced about the axis of the sample cell relative to the light source for receiving a measured signal, an amplifier for boosting the output signal, a processor coupled to the source and detector for activating the source and processing the output signal and a display coupled to the processor for displaying measurements.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9, 18-27, 29-30, and 54-55 rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al (5,506,679) in view of Lilienfeld (6,055,052).

Cooper et al teach of a device for measuring qualities of a substance comprising a sample cell for receiving the substance, a housing defining a recess for receiving a sample cell, at least one light source, at least one first detector spaced about the axis of the sample cell relative to the light source for receiving a measured signal, an amplifier for boosting the output signal, a processor coupled to the source and detector for activating the source and processing the output signal and a display coupled to the processor for displaying measurements.

Cooper et al lacks the teaching of a plurality of light sources.

Lilienfeld teach of using a plurality of light sources.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use more than one light source in the apparatus taught by Cooper et al as taught by Lilienfeld in order to create a more accurate device. By taking multiple measurements, which is well known in the art of optical measurements, one would obtain a more precise measurements.

With reference to the light sources being at 45 degrees from each other, it would have been obvious to one having ordinary skill in the art at the time the invention was made to put the sources at 45 degrees from each other, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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Claims 11-17 and 56-60 rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al (5,506,679) in view of Wohlstein et al (5,691,701).

Cooper et al teach of a device for measuring qualities of a substance comprising a sample cell for receiving the substance, a housing defining a recess for receiving a sample cell, at least one light source, at least one first detector spaced about the axis of the sample cell relative to the light source for receiving a measured signal, an amplifier for boosting the output signal, a processor coupled to the source and detector for activating the source and processing the output signal and a display coupled to the processor for displaying measurements.

Cooper et al lacks the teaching of the processor containing reference values.

Wohlstein et al teach of obtaining reference values.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to place reference values in the processor as shown by Wohlstein in order to see whether the measured values fall within the range of the preselected boundaries.

### ***Conclusion***

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax Machine located in Crystal Plaza 4. The form of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is:*

**703-308-7722**

If the applicant wishes to send a Fax dealing with a Proposed Amendment for discussion for a phone interview then the fax should:

1) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Examiner Amanda H. Merlino* whose telephone number is (703) 305-3488. The examiner can be reached on Mondays and Thursdays only.

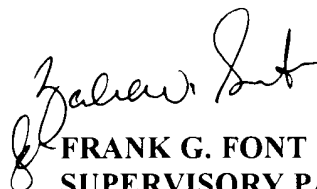
Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-0956.

Amanda H. Merlino *ahm*

Patent Examiner

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March 20, 2003/ahm



**FRANK G. FONT**  
**SUPERVISORY PATENT**  
**EXAMINER**